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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/579,133	12/18/2006	Ingolf Braune	15283A-008600US	6267

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EXAMINER	
BONK, TERESA	
ART UNIT	PAPER NUMBER
3725	
MAIL DATE	DELIVERY MODE
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/579,133	BRAUNE ET AL.	
	Examiner	Art Unit	
	TERESA BONK	3725	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-12* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-12* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *12 May 2006* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *5/12/06*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

With regards to independent claims 1 and 8, there is insufficient antecedent basis for "the protected zone," and those depending therefrom.

With regards to claim 4, there is insufficient antecedent basis for "the geometrical shape."

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1 and 7-12 are rejected under 35 U.S.C. 102(e) as being anticipated by Braune et al. (US PGPUB 2003/0062469).

The applied reference has a common assignee and inventor with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

Braune et al. discloses an apparatus for protecting a dangerous zone of a machine comprises a bending press (Paragraph 0001) against unwanted entries into the zone comprising first (11) and second (13) tool parts mounted for relative movement of the first tool part in a closing direction (15) towards the second tool part and defining an opening gap (Figure 5) between the tool parts, an optoelectronic sensor for monitoring the opening gap including a light emitter (19) for completely illuminating the dangerous zone (17) with a light beam (23), a light receiver (21) for receiving the emitted light, and a control unit (evaluation unit) for generating a danger signal when an intrusion into the protected zone (29) is detected, the light emitter and the light receiver being configured so that when the opening gap becomes reduced as the first tool part moves in the closing direction, the protected zone is correspondingly reduced in the closing direction and so that during further movements of at least one of the first and second tool parts the entire opening gap is within the protected zone (Paragraph 0044).

With regards to claim 9, the light beam has a cross-section at the light receiver which is greater than and completely illuminates the light receiver (Figure 5, Paragraphs 0043 and 0068).

With regards to claim 10, Braune et al. also discloses including means (arms in Figure 5) fixedly securing the sensor to the first tool part for movement with the first tool part during an operating cycle of the first tool part (Paragraph 0043).

With regards to claims 11 and 12, the receiver comprises a location resolving receiver comprises a CMOS-receiver defining a matrix (Paragraph 0032).

Braune et al. also discloses a method of securing a machine having first (11) and second (13) tool parts that define an opening gap (Figure 5) between them, at least the first tool part being movable relative to the second tool part in a movement direction (15) during an operating cycle for deforming a workpiece (25) between them by reducing a size of the opening gap in the movement direction, the method comprising generating the protected zone (29) so that it precedes the first tool part and extends over at least a portion of the opening gap in the direction of relative movement, monitoring the protected zone with an optoelectronic sensor (Paragraph 0001) and generating a danger signal (Paragraph 004) in response to a breach of the protected zone, and when a size of the opening gap in the movement direction becomes smaller than the protected zone in the movement direction, correspondingly reducing the size of the protected zone in the movement direction of the first tool part until during subsequent closing movements of the first tool part substantially the entire opening gap is within the protected zone (Paragraph 0044).

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3, 7, 8 and 10 rejected under 35 U.S.C. 102(b) as being anticipated by Fiessler (US PGPUB 2002/0104958). Fiessler discloses an apparatus for protecting a dangerous zone of a machine comprises a bending press (pressbrakes) against unwanted entries into the zone comprising first (10) and second (11) tool parts mounted for relative movement of the first tool part in a closing direction towards the second tool part and defining an opening gap (Figure 1) between the tool parts, an optoelectronic sensor for monitoring the opening gap including a light emitter (19) for completely illuminating the dangerous zone (designated as the area between the working portion 12 and groove 13) with a light beam (22-24), a light receiver (20) for receiving the emitted light, and a control unit (31) for generating a danger signal when an intrusion into the protected zone (designated as the area where the light beam is shone) is detected, the light emitter and the light receiver being configured so that when the opening gap becomes reduced as the first tool part moves in the closing direction, the protected zone is correspondingly reduced in the closing direction and so that during further movements of at least one of the first and second tool parts the entire opening gap is within the protected zone (Paragraph 0021).

With regards to claim 10, Fiessler also discloses including means (15 and 16) fixedly securing the sensor to the first tool part for movement with the first tool part during an operating cycle of the first tool part (Paragraph 0019).

Fiessler also discloses a method of securing a machine having first (10) and second (11) tool parts that define an opening gap (Figure 1) between them, at least the first tool part being movable relative to the second tool part in a movement direction during an operating cycle for deforming a workpiece (14) between them by reducing a size of the opening gap in the movement direction, the method comprising generating the protected zone (designated as the area where the light beam is shone) so that it precedes the first tool part and extends over at least a portion of the opening gap in the direction of relative movement, monitoring the protected zone with an optoelectronic sensor and generating a danger signal (Paragraph 0021) in response to a breach of the protected zone, and when a size of the opening gap in the movement direction becomes smaller than the protected zone in the movement direction, correspondingly reducing the size of the protected zone in the movement direction of the first tool part until during subsequent closing movements of the first tool part substantially the entire opening gap is within the protected zone (Paragraph 0021).

With regards to claim 2, Fiessler discloses that during subsequent closing movements, completely deactivating the protected zone after an extent of the protected zone in the movement direction had reached a predetermined minimum (Paragraph 0008).

With regards to claim 3, Fiessler also discloses dividing a movement speed of the first tool part into a relatively faster, first closing speed and a subsequent, relatively slower second closing speed and switching from the first closing speed to the second closing speed on the basis of remaining travel distance for the first tool part established during a preceding test run of the first tool part (Paragraph 0027-0029).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 4-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fiessler in view of Haberer et al. (US PGPUB 2002/0017603. Fiessler discloses the invention substantially as claimed except for deactivating at least a portion of the protected zone as a function of the size or shape of the workpiece after the workpiece has entered the protected zone and determining a position of an upper surface of the workpiece during a test run of the first tool part and learning/memorizing the position of the workpiece as a contact point between the part and workpiece. Haberer et al. discloses a method for monitoring an entrance to a hazardous area including deactivating at least a portion of the protected zone as a function of the size or shape of the workpiece (a workpiece can be considered to be an object in this reference) after the workpiece has entered the protected zone and determining a position of an upper surface of the workpiece during a test run (predetermined signal pattern) of the first tool part and learning/memorizing the position of the workpiece as a contact point between the part and workpiece (Paragraph 0067-0068). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to permit deactivation by the presence of the workpiece and determining of position to create a contact point because applying a known technique to a known device ready for improvement yields predictable results.

Conclusion

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to TERESA BONK whose telephone number is 571-272-1901. The examiner can normally be reached on M-F 9:00 AM - 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Derris Banks can be reached on 571-272-4419. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Derris H Banks/
Supervisory Patent Examiner, Art Unit 3725

Teresa M. Bonk
Examiner
Art Unit 3725